

## 4 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION MEASURES

### 4.1 INTRODUCTION

#### 4.1.1 ORGANIZATION OF THE ANALYSIS AND EVALUATION METHODOLOGY

This chapter provides a detailed analysis of environmental resource areas (e.g., biological resources, air quality, hydrology and water quality, and noise) with respect to their applicable regulatory background, existing environmental setting, potential to be significantly affected by the project alternatives, and mitigation measures to reduce or avoid potentially significant impacts. The resource areas evaluated in Chapter 4 include those originally identified for review in the notice of preparation (NOP)/notice of intent for this environmental impact statement (EIS)/EIS/environmental impact report (EIR), those identified for consideration in the National Environmental Policy Act (NEPA), environmental topics originating from the California Environmental Quality Act (CEQA) Guidelines Appendix G Checklist, and issue areas identified in the Tahoe Regional Planning Agency (TRPA) Initial Environmental Checklist. Exceptions are agricultural resources and population and housing. As discussed in Section 1.3, Scope and Focus of the EIS/EIS/EIR, agricultural resources are not evaluated because the action alternatives would not affect any lands used for agricultural production, zoned for agriculture, or considered important farmland. As also identified in Section 1.3, housing is not discussed in detail in this EIS/EIS/EIR as the proposed project does not include construction of housing as part of the project, would not displace existing housing, and would not generate demand for new housing. Potential project effects on populations and employment are addressed in Section 5.5, Growth-Inducing Impacts of the Proposed Project, and Section 5.6, Socioeconomics and Environmental Justice.

Sections 4.2 through 4.14 of this EIS/EIS/EIR are organized into the following major subsections.

**Regulatory Setting:** This section presents the applicable regulatory framework and planning context, if any, for the specific technical issue, under which the proposed project would be implemented. The section includes a discussion of applicable federal, state, TRPA, and local regulation. At the local level, plans reviewed in the preparation of each section, at a minimum, include the Placer County General Plan, Community Plans, Plan Area Statements, the Town of Truckee General Plan, and the Martis Valley Community Plan. Other plans were also reviewed where they were applicable to particular environmental resource area; for example, consideration of the Placer County 2035 Regional Transportation Plan Document in Section 4.12, Traffic and Transportation.

California Public Utilities Commission (CPUC) General Order No. 131-D establishes that local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. For this project, Placer County, Nevada County, and the Town of Truckee would not have discretionary permitting authority over the project. However, for informational purposes, pertinent local regulations and policies are identified in this EIS/EIS/EIR and under the provisions of General Order No. 131-D, the Applicant is encouraged to seek resolution of any land use issues with these entities. In the event that resolution of land use conflicts cannot be achieved, either party to the dispute may file a notice of such with the CPUC and a hearing shall be held on the matter within 30 days of receipt of the notice.

**Existing Conditions/Affected Environment:** This section describes the existing regional and local environmental conditions relevant to the issue under evaluation. The regional setting provides context for the analysis of conditions within the project footprint. For the purpose of this EIS/EIS/EIR, the project footprint includes the right-of-way (ROW) for all alternative power line alignments, stringing sites, access ways and roads, staging areas, and substations. The potential removal of hazard trees outside the defined alignment ROW is considered as

appropriate in each section. Except as otherwise noted, the study area under consideration for the environmental resources is generally analogous with the project footprint. Expanded study areas have been established for some resource discussions, as determined by the potential for environmental impact (e.g., hazard tree removal outside the defined ROW) or the potential for information outside the project footprint to inform the analysis (e.g., special-status species occurrences outside the ROW indicating the potential for a species to occur inside the ROW).

**Environmental Consequences and Recommended Mitigation Measures:** This section identifies the criteria used to determine the level of significance of an environmental impact and discusses potentially significant effects of the project alternatives on the existing environment. Both direct and indirect environmental effects are considered. Criteria to determine the significance of impacts were derived from several sources. The TRPA Initial Environmental Checklist (IEC) poses questions related to various environmental issue areas to assist in determining whether environmental effects may occur. However, the purpose of the TRPA IEC is primarily to determine if an EIS is required and to help define the topics to be evaluated in greater detail. While many of the IEC checklist questions are conducive for use as significance criteria (that is, they include a defined standard, qualitative or quantitative), many are not. For example, the IEC poses the question pertaining to air quality: “Will the proposal result in increased use of diesel fuel?” Because the question does not include a standard, a “yes” answer does not necessarily mean a significant air quality impact will occur as a project could result in a very minor increase in diesel fuel use (e.g., a gallon a day) and could include elements that have beneficial effects on air quality. The IEC questions are used as a guide in evaluating impacts in this EIS/EIS/EIR and in some cases have been tailored to function as significance criteria.

The sample environmental checklist provided in Appendix G of the State CEQA Guidelines is also used as a source of significance criteria. Because the checklist includes standards (qualitative or quantitative), the questions are generally well suited for use as significance thresholds; however, they are modified or expanded as needed in this EIS/EIS/EIR to better reflect the nature and location of the project, and to support the environmental analysis. For example, local air pollution control district quantitative emission thresholds are used to elaborate on the thresholds provided in Appendix G.

To comply with NEPA, an environmental document must consider the context and intensity of the environmental effects that would be caused by or result from the proposed action. Under NEPA, the significance of an effect is used solely to determine whether an EIS must be prepared. The factors that are taken into account under NEPA to determine the significance of an action in terms of the context and the intensity of its effects are typically encompassed by the TRPA and CEQA criteria used for this analysis. However, where appropriate, specific significance criteria not encompassed by the TRPA IEC checklist or the State CEQA Guidelines Appendix G checklist may be added to address topics of particular concern to the US Forest Service (NEPA lead agency) or the US Army Corps of Engineers (NEPA cooperating agency).

Project impacts are numbered sequentially for Alternative 1 (PEA Alternative) through Alternative 5 (No Action/No Project Alternative) in each section, with the alternative identified in parenthesis in the impact title. For example, impacts in Section 4.2 are numbered 4.2-1 (Alt. 1), 4.2-2 (Alt. 1), 4.2-3 (Alt. 1), and so on for Alternative 1 (PEA Alternative). Impacts in Section 4.2 for Alternative 2 (Modified Alternative) are numbered 4.2-1 (Alt. 2), 4.2-2 (Alt. 2), 4.2-3 (Alt. 2), and so on. A bold font impact title, and a summary of each impact and its level of significance, precedes the full discussion of each impact. The full impact discussion considers the potential for the alternative to result in environmental impacts in light of established applicant proposed measures (APMs) designed to minimize environmental effects (described in Section 3.7, Applicant Proposed Measures) and provides the evidence on which conclusions are made. In cases where impacts are still considered significant after implementation of applicable APMs, and feasible mitigation would reduce these effects, a mitigation measure (or measures) is described below the impact discussion, and the significance of the impact after mitigation is identified. The mitigation measures are numbered to correspond with the impact addressed by the measure; therefore, if Impact 4.2-1 (Alt. 1) is addressed by a single mitigation measure, the measure would be numbered Mitigation Measure 4.2-1 (Alt. 1). If multiple mitigation measures are provided for a single impact, a letter is added to the end of each mitigation measure number. For example, mitigation measures for Impact 4.2-1 (Alt. 1) would be numbered: Mitigation Measure 4.2-1a (Alt. 1), Mitigation Measure 4.2-1b (Alt. 1), and so on.

The CalPeco 625 and 650 Electrical Line Upgrade Project alternatives, Alternatives 1 (PEA Alternative) through Alternative 5 (No Action/No Project Alternative), are analyzed at an equal level of detail in this chapter. Impacts and associated mitigation measures, if necessary, are identified for each alternative in each of the resource sections. Because all project alternatives except Alternative 5 (No Action/No Project Alternative) contemplate some level of development in the project area, the alternatives may have many of the same or similar impacts, use of APMs, and mitigation measures where necessary. In these instances, rather than repeating the entire impact discussion and mitigation measures for each alternative, the reader is referred to the initial impact discussion and mitigation descriptions provided for Alternative 1 (PEA Alternative), and any different conditions under Alternative 2 (Modified Alternative), Alternative 3 (Road Focused Alternative), or Alternative 4 (Proposed Alternative) are identified.

**Cumulative Impacts:** At the end of each resource section is a discussion of project effects in the context of other existing and proposed development that may contribute to cumulative impacts. Cumulative impacts are further described below, including the assumptions and approach used for the cumulative impacts analysis in each resource section.

## 4.1.2 CUMULATIVE IMPACT ANALYSIS METHODOLOGY

This section provides information on the cumulative impact analysis methodology common to the evaluation of cumulative impacts for all environmental issue areas later in this chapter. Each discussion of cumulative impacts provided in Sections 4.2, 4.3, 4.4, etc. utilizes the information provided here.

### DEFINITION OF CUMULATIVE IMPACTS

NEPA implementing regulations require consideration of cumulative impacts (40 Code of Federal Regulations 1508.25). Cumulative impacts are defined as an “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 Code of Federal Regulations 1508.7).

Section 15130(a) of the State CEQA Guidelines requires a discussion of the cumulative impacts of a project when the project’s incremental effect is cumulatively considerable. Cumulatively considerable, as defined in State CEQA Guidelines Section 15065(a)(3), means that the “incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” State CEQA Guidelines Section 15355 defines a cumulative impact as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

TRPA looks to NEPA and CEQA for guidance in assessing cumulative impacts (and thus the analysis contained in this document is sufficient for TRPA purposes).

### CUMULATIVE IMPACT APPROACH

State CEQA Guidelines Section 15130 identifies two basic methods for establishing the cumulative environment in which a project is considered: 1) the use of a list of past, present, and probable future projects; or 2) the use of adopted projections from a general plan, other regional planning document, or a certified EIR for such a planning document. NEPA and TRPA do not provide similarly detailed guidance on methods for cumulative impact analysis. This cumulative analysis uses the “list” approach to identify the cumulative setting. The effects of past and present projects on the environment are reflected by the existing conditions in the project area. A

list of probable future projects is provided below. Probable future projects are those in the project vicinity that have the possibility of interacting with the proposed project to generate a cumulative impact (based on proximity and construction schedule) and either:

- ▲ are partially occupied or under construction,
- ▲ have received final discretionary approvals,
- ▲ have applications accepted as complete by local agencies and are currently undergoing environmental review, or
- ▲ are proposed projects that have been discussed publicly by an applicant or that otherwise become known to a local agency and have provided sufficient information about the project to allow at least a general analysis of environmental impacts.

## CUMULATIVE SETTING

### GEOGRAPHIC SCOPE

The geographic area that could be affected by the project varies depending on the type of environmental resource being considered. When the effects of the project are considered in combination with those other past, present, and probable future projects to identify cumulative impacts, the other projects that are considered may also vary depending on the type of environmental effects being assessed. Table 4.1-1 presents the general geographic areas associated with the different resources addressed in this analysis.

Table 4.1-1 Geographic Scope of Cumulative Impacts	
Resources Issue	Geographic Area
Land Use	limited to project site
Forestry Resources	the Truckee-Tahoe region
Scenic Resources	project site and surrounding public viewpoints
Geology, Soils, and Land Capability Coverage	regional for Land Capability Coverage; for geology and soils activities in the immediate vicinity
Hydrology and Water Quality	local and regional watersheds
Biological Resources	defined differently for each species, based on species distribution, habitat requirements, and scope of impact from proposed activities
Recreation	regional (overall accessibility of recreational opportunities) and local (interactions with individual recreational activities)
Heritage, Cultural, and Paleontological Resources	limited to project site
Hazards and Hazardous Materials	immediate project vicinity
Public Services and Utilities	regional (water, wastewater, electricity, natural gas, solid waste) and local (police and fire)
Traffic and Transportation	regional and local roadways where the project could contribute traffic
Air Quality, Greenhouse Gas Emissions and Climate Change	regional (pollutant emissions that affect the air basins), immediate project vicinity (pollutant emissions that are highly localized), and global/statewide for greenhouse gasses
Noise	immediate project vicinity where project-generated noise could be heard concurrently with noise from other sources

## PROJECT LIST

Table 4.1-2, below, provides the list of probable future projects that meet the requirements stated above, in the Cumulative Impact Approach section. Projects are listed that are in the project vicinity and that have the possibility of interacting with the proposed project to generate a cumulative impact. This list of projects was utilized in the development and analysis of the cumulative settings and impacts for each resource. Past and current projects in the project vicinity were also considered as part of the cumulative setting, as they contribute to the existing conditions/baseline upon which the proposed project and each probable future project's environmental effects are compared, but are not listed in Table 4.1-2. The locations of cumulative projects listed in Table 4.1-2 relative to the project area are shown on Exhibit 4.1-1, Cumulative Projects.

Significance criteria, unless otherwise specified, are the same for cumulative impacts as project impacts for each environmental topic area. When considered in relation to other probable future projects, cumulative impacts to some resources could be significant and more severe than those caused by the proposed project alone.

Table 4.1-2 Cumulative Project List				
Project Name (Exhibit 4.1-1 Key)	Location	Description	Residential Units and/or Non-Residential Area	Project Status
Gregory Creek Subdivision (1)	0.25-mile north of the intersection of Donner Pass Road with Donner Lake Road, Truckee	Single-family, duplex, and attached multi- family residential.	31 residential units; 32 acre site	Draft EIR released in 2009. No construction schedule known as of preparation of this document.
Coldstream Specific Plan (2)	Coldstream Road south of Interstate 80, Truckee	Planned Community.	300 residential units; 30,000 square feet of commercial	Plan and EIR have been revised following 2011 release of a draft EIR. As of preparation of this document project has not been considered by the Town of Truckee and construction timing is uncertain.
Pollard Station – A Senior Neighborhood (3)	10335 Old Brockway Road, Truckee (West of Pine Cone Road terminus, at Hilltop)	Age-restricted senior neighborhood: lodge and condominiums (8-acres in the Hilltop Master Plan area).	86 unit senior lodge and 40 to bedroom condominium units	Revised application submitted January 2013.
Joerger Ranch Specific Plan (4)	Intersection of SR 267, Brockway Road, and Soaring Way, Truckee	70-acre mixed use planned community including industrial, office space, public facility, transportation, and apartment uses.	318 dwelling units	EIR in preparation.

Table 4.1-2 Cumulative Project List				
Project Name (Exhibit 4.1-1 Key)	Location	Description	Residential Units and/or Non-Residential Area	Project Status
Canyon Springs Subdivision (5)	West of Martis Peak Road and south of Glenshire Drive, Truckee	Clustered residential development including single family and affordable housing/multifamily units	177 single-family lots and 8 affordable housing lots, 204 total units; 171 acres of open space	Draft EIR comment period ended March 2013. Project development to occur in phases from 2012 to 2019.
Martis Valley Trail (6)	Town of Truckee to Brockway Summit	The proposed project is a paved, multi-use recreational trail extending from the southern limits of the Town of Truckee at the Nevada/Placer County line eastward to the ridgeline defining the Lake Tahoe Basin. A 5.4-mile section will run along SR 267 between Truckee and Northstar.	--	CEQA environmental review completed in 2012; project approved. Construction will be a multi-year effort. Construction of Phase 1 (Shaffer Mill Road to the wildlife viewing area along SR 267) to begin in 2014.
Northstar Mountain Master Plan (7)	5001 Northstar Drive, Truckee	Mountain Master Plan for the existing ski resort area. Various additions and changes to ski lifts, snowmaking, trails, bridges, access, ropes course, bike trails, and campsites.	--	Notice of Preparation public review ended December 2012. EIR in preparation. Final EIR expected at the end of 2013. Project build out would occur between 2024 and 2029.
Northstar Highlands Phase II (8)	Northstar Drive, Truckee	Modifications to the original subdivision approval, reducing the development area and number of housing units (from 576 units to 446 units).	50 townhomes, 10 single family lots, 386 condominiums, up to 147 commercial condominiums, 4,000 square feet of commercial space	Initial study checklist has been prepared.
Cabin Creek Biomass Facility Project (9)	900 Cabin Creek Road, Truckee	Develop a two megawatt wood-to-energy facility that would utilize a gasification technology. Would support fuels reduction and thinning activities within and outside of the Lake Tahoe Basin. Fueled by forest-sourced material only.	--	EIR certified by Planning Commission in December 2012. Construction could begin as early as 2014.

Table 4.1-2 Cumulative Project List

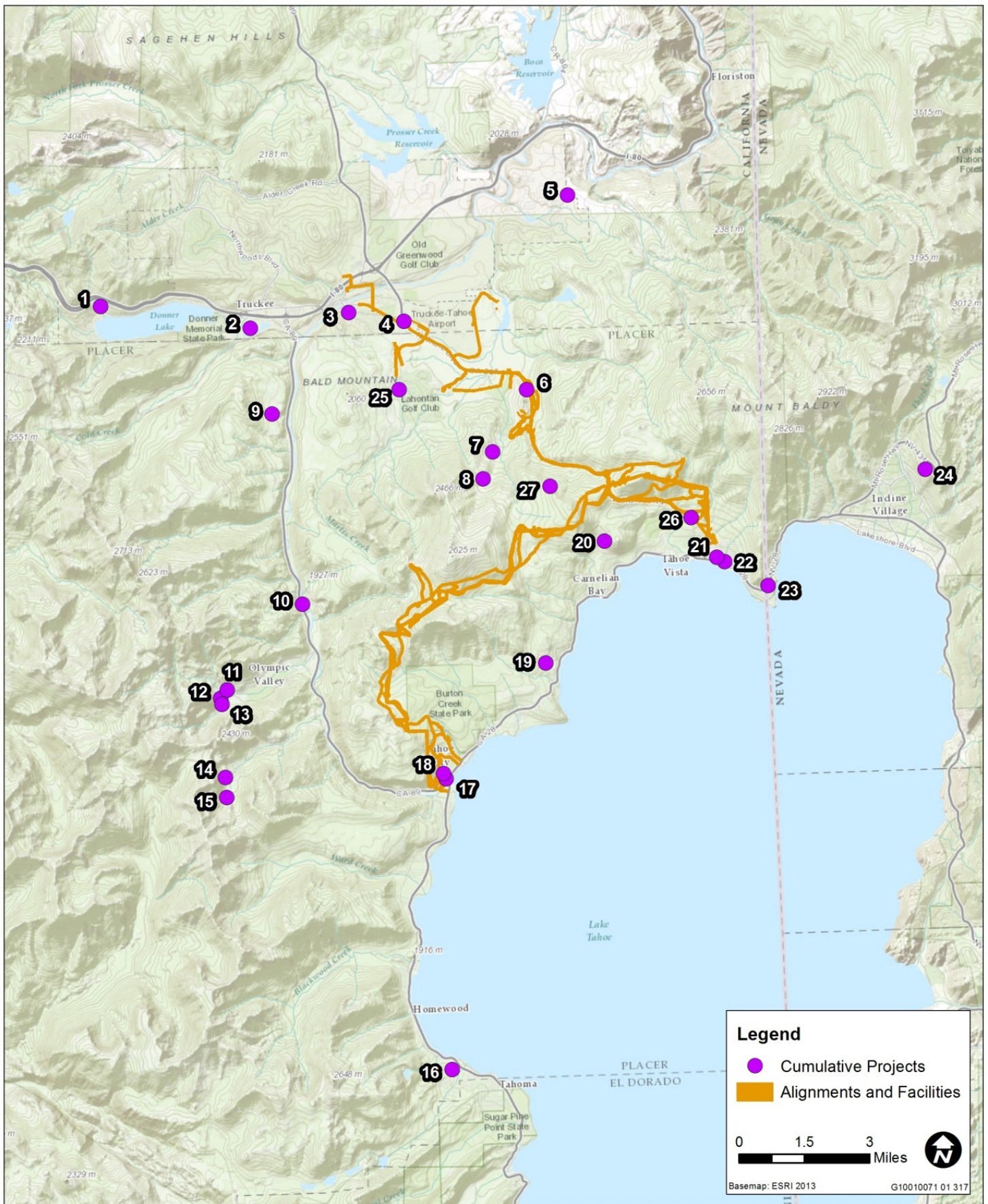
Project Name (Exhibit 4.1-1 Key)	Location	Description	Residential Units and/or Non-Residential Area	Project Status
Truckee River Corridor Access Plan (10)	Truckee River Watershed, Placer and Nevada counties	Continuous and coordinated system of preserved lands and habitat, with a connecting corridor of walking, in-line skating, equestrian, bicycle trails, and angling and boating access from Lake Tahoe to the Martis Valley.	--	Application submitted; design and environmental review underway.
Squaw Valley Red Dog Lift Replacement (11)	Terminus of Squaw Valley Road, west of State Route 89, Squaw Valley	Replace the existing triple chairlift with a high-speed, detachable, 6-place chairlift.	--	Mitigated negative declaration prepared, public comment period closed February 2013.
Village at Squaw Valley Specific Plan (12)	Western end of Squaw Valley	Establishes the guiding principles for comprehensive development of approximately 100 acres of the previously developed Squaw Valley Olympic Village.	Up to 1,295 resort residential units and 454,000 square feet of commercial	NOP public review period ended November 2012. Draft EIR in preparation.
Squaw Valley Timberline Twister (13)	Squaw Valley	Construction of an alpine coaster attraction in a triangular stand of trees between the Lower Far East and lower Red Dog chairlift alignments.	--	Application submitted to Placer County in August 2012. Could be installed in the summer of 2013.
Alpine Sierra Subdivision (14)	Terminus of Alpine Meadows Road near Alpine Meadows Ski Resort	44-acre planned development to include single-family lots and commonly held parcels.	47 units	Environmental review complete. Construction schedule unknown.
Alpine Meadows Hot Wheels Lift Replacement (15)	Alpine Meadows Ski Resort, Alpine Meadows	Replace the existing triple chairlift with a detachable quad chairlift	--	Environmental review complete; project approved in December 2012. Implementation could begin in the summer of 2013.
Homewood Mountain Resort Master Plan (16)	5145 Westlake Boulevard, Homewood	Redevelop mixed-uses at the North Base area, residential uses at the South Base area, a lodge at the Mid-Mountain Base area, and ski area.	--	EIR/EIS certified and project approved in December 2011. In January 2013, a US District Court ruled that the EIR was inadequate. The outcome of litigation and timeframe for construction are unknown at the time of writing of this document.

Table 4.1-2 Cumulative Project List				
Project Name (Exhibit 4.1-1 Key)	Location	Description	Residential Units and/or Non-Residential Area	Project Status
SR 89/Fanny Bridge Improvement Project (17)	State routes 89 and 28 at the Truckee River Crossing, Tahoe City	Construction of a new bridge over the Truckee River, repair or replacement of Fanny Bridge, and various other improvements.	--	Application complete. NOP released, scoping period ended January 30, 2012. EIR/EIS/Environmental Assessment under preparation. Construction target is 2014-2015.
Tahoe City Vision Plan (18)	Tahoe City (contiguous with Tahoe City Community Plan boundaries)	Visioning effort to guide Area Plan development.	--	Planning effort. Vision planning underway.
Dollar Creek Shared-Use Trail (19)	Between the existing trail at Dollar Hill and the Cedar Flats neighborhood on the North Shore	2.5 mile long shared-use trail.	--	Environmental review complete; project approved. Construction expected to occur between 2013 and 2015.
Carnelian Fuels Reduction and Healthy Forest Restoration Project (20)	Adjacent to Cedar Flat, Carnelian Bay, Tahoe Vista, and Kings Beach	Mechanical, hand, and prescribed burning treatments to reduce surface fuels and conifer density.	--	Decision notice signed on August 20, 2012. Implementation is expected to begin in 2013 and be completed within 7-10 years, depending on funding and contractor availability.
Rainbow Parking (21)	8334 Rainbow Avenue, Kings Beach	18-space public parking lot off of Rainbow Drive. Pervious concrete proposed for 16 spaces, with asphalt handicapped parking space, adjacent space, and drive aisle. Landscaping and wooden fencing proposed as a visual screen.	--	Initial study in progress.
Kings Beach Commercial Core Improvement Project (22)	Kings Beach	Project involves reducing SR 28 in Kings Beach from a 4-lane highway to a 3-lane highway with a roundabout. Project is a SR 28 beautification project, and includes off-highway and water quality improvement components.	--	Environmental review complete; project approved. Construction of off-highway and water quality improvements and neighborhood traffic calming measures underway in 2013. Construction will be a multi-year effort. County requires additional funding to complete project. Therefore, completion date is unknown at the time of writing of this document.



Table 4.1-2 Cumulative Project List

Project Name (Exhibit 4.1-1 Key)	Location	Description	Residential Units and/or Non-Residential Area	Project Status
Boulder Bay Project (23)	Crystal Bay, Nevada	Redevelopment of Tahoe Biltmore on North Shore. Project includes a four-story, 275-room hotel with a 10,000 square-foot casino. Implementation of the project would reduce the total commercial floor area at the site from approximately 56,000 to 21,000 square feet.	--	Environmental review complete; project was approved on April 27, 2010. Construction was planned for 2012, but applicant is still securing financing. Construction start date unknown at the time of writing of this document.
Incline Fuels Reduction and Healthy Forest Restoration Project (24)	Adjacent to Incline Village, Nevada	Mechanical, hand, and prescribed burning treatments. Tree thinning, biomass removal, prescribed burning, chipping, and mastication.	--	Decision notice signed on February 15, 2013. Implementation is expected to begin in 2014 and be completed within 10 years, depending on funding and contractor availability.
Martis Camp (25)	1200 Lodgetrail Drive, Truckee, CA	A private golf and ski club community of upscale second homes.	663 lots (between 2.5 and 0.5 acres) on over 2,000 acres	Opened in 2006. Partially built-out. Many homes and community facilities are in place, but there are also lots available.
Kingswood Alternate Feed Project (26)	Hwy 267 at Kingswood Subdivision	5-pole distribution tap off of the existing 650 line underbuild to be used as an alternate feed for the Kingswood Subdivision.	--	Construction scheduled for 2013 pending final permits.
Martis Valley Opportunity at Northstar (27)	Northstar	Mixed residential uses (including single family, town homes, cabins, condos) and commercial development (including resort services, fitness center, family entertainment, and community center).	760 residential units; approximately 7 acres of commercial development	Expected submittal of project application to Placer County in fall 2013.
Sources: USDA Forest Service LTBMU 2013, Placer County 2013, Town of Truckee 2012, Town of Truckee 2013, Tahoe Transportation District 2012, Endres 2013, Northstar 2012				



Source: adapted by Ascent Environmental 2013

**Exhibit 4.1-1**

**Cumulative Projects**

